

LISTING OF CLAIMS:

1. (Original) A method comprising:

placing an intermediate anchor having a wedge hole at a concrete construction joint;

inserting a tendon through the intermediate anchor leaving a sheathing of the tendon substantially intact;

making a single cut circumferentially around the sheathing inside the wedge hole;

tensioning the sheathed tendon following setting of concrete poured on a bearing side of the concrete construction joint, whereby the tensioning causes the sheathing to pull away from the single cut so as to thereby create an exposed portion of the tendon; and,

gripping the exposed portion with a wedge to hold the tension.

2. (Original) The method of claim 1 wherein the tensioning of the sheathed tendon comprises applying a gripper wedge to the tendon outside of the intermediate anchor.

3. (Original) The method of claim 2 wherein application of the gripper wedge damages the sheathing of the tendon, and wherein the method further comprises repairing the damage before pouring concrete on a stressing side of the concrete construction joint.

4. (Original) The method of claim 3 wherein the repairing of the damage comprises taping.

5. (Previously Presented) The method of claim 1 further comprising attaching an adaptor to the intermediate anchor on the bearing side and inserting an O-ring within the adaptor so as to engage the adaptor and the tendon before concrete is poured on the bearing side of the concrete construction joint.

6. (Original) The method of claim 5 further comprising attaching a bushing to the adaptor so as to bias the O-ring into sealing engagement with the adaptor and the tendon.

7. (Original) The method of claim 1 further comprising attaching a cap to the intermediate anchor on a stressing side of the construction joint and inserting an O-ring within the cap to engage the cap and the tendon.
8. (Original) The method of claim 7 further comprising attaching a bushing to the cap so as to bias the O-ring into sealing engagement with the cap and the tendon.
9. (Original) The method of claim 7 wherein the O-ring has an inner diameter larger than an outer diameter of the tendon.
10. (Previously Presented) The method of claim 1 further comprising:
 - attaching an adaptor to the intermediate anchor on the bearing side;
 - attaching a backside bushing to the adaptor, the backside bushing and the adaptor attached to the intermediate anchor before concrete is poured on the bearing side of the concrete construction joint;
 - attaching a cap to the intermediate anchor on a stressing side of the construction joint;
and;
 - attaching a frontside bushing to the cap
11. (Previously Presented) The method of claim 10 further comprising:
 - inserting a backside O-ring within the adaptor so as to engage the adaptor and the tendon before concrete is poured on the bearing side of the concrete construction joint; and
 - inserting a frontside O-ring within the cap so as to engage the cap and the tendon.
12. (Currently Amended) An intermediate anchor system for a tendon comprising:
 - an intermediate anchor having a backside, a frontside, a body defined between the frontside and the backside, and a wedge hole arranged to receive a wedge; and,
 - backside and frontside seals at the backside and the frontside, respectively, of the intermediate anchor, wherein the backside and frontside seals are arranged to seal an exposed portion of the tendon within the body, and wherein the exposed portion of the tendon is confined to the body.

13. (Original) The intermediate anchor system of claim 12 wherein the backside seal comprises an adaptor engaging the intermediate anchor and an O-ring engaging the adaptor and the tendon.

14. (Original) The intermediate anchor system of claim 13 wherein the backside seal further comprises a bushing biasing the O-ring into sealing engagement with the adaptor and the tendon.

15. (Original) The intermediate anchor system of claim 12 wherein the frontside seal comprises a cap engaging the intermediate anchor and an O-ring engaging the cap and the tendon.

16. (Original) The intermediate anchor system of claim 15 wherein the frontside seal further comprises a bushing biasing the O-ring into sealing engagement with the cap and the tendon.

17. (Original) The intermediate anchor system of claim 15 wherein the O-ring has an inner diameter at least somewhat larger than an outer diameter of the tendon.

18. (Original) The intermediate anchor system of claim 12 wherein the backside seal comprises an adaptor engaging the intermediate anchor and a backside O-ring engaging the adaptor and the tendon, and wherein the frontside seal comprises a cap engaging the intermediate anchor and a frontside O-ring engaging the cap and the tendon.

19. (Previously Presented) An intermediate anchor system for a tendon comprising:
an intermediate anchor having a backside, a frontside, a body, and a wedge hole arranged to receive a wedge; and,
backside and frontside seals at the backside and the frontside, respectively, of the intermediate anchor, wherein the backside and frontside seals are arranged to seal an exposed

portion of the tendon within the body, and wherein the exposed portion of the tendon is confined to the body;

wherein the backside seal comprises an adaptor engaging the intermediate anchor and a backside O-ring engaging the adaptor and the tendon, and wherein the frontside seal comprises a cap engaging the intermediate anchor and a frontside O-ring engaging the cap and the tendon; and

wherein the backside seal further comprises a backside bushing biasing the backside O-ring into sealing engagement with the adaptor and the tendon, and wherein the frontside seal further comprises a frontside bushing biasing the frontside O-ring into sealing engagement with the cap and the tendon.

20. (Original) The intermediate anchor system of claim 12 wherein the frontside seal comprises:

a cap engaging the intermediate anchor;

an O-ring within the cap and engaging both the cap and the tendon; and,

a bushing engaging the cap so as to bias the O-ring into sealing engagement with the cap and the tendon.

21. (Previously Presented) The intermediate anchor system of claim 12

wherein the backside seal is on a bearing side of the intermediate anchor system, and wherein the backside seal comprises:

an adaptor having an adaptor neck engaging an anchor neck of the intermediate anchor;

an O-ring within the adaptor and engaging both the adaptor and the tendon; and,

a bushing engaging the adaptor so as to bias the O-ring into sealing engagement with the adaptor and the tendon.

22. (Previously Presented) An intermediate anchor system for a tendon comprising:

an intermediate anchor having a backside, a frontside, a body, and a wedge hole arranged to receive a wedge; and,

backside and frontside seals at the backside and the frontside, respectively, of the intermediate anchor, wherein the backside and frontside seals are arranged to seal an exposed portion of the tendon within the body, and wherein the exposed portion of the tendon is confined to the body.

wherein the backside seal is on a bearing side of the intermediate anchor system, and wherein the backside seal comprises:

an adaptor having an adaptor neck engaging an anchor neck of the intermediate anchor;

an O-ring within the adaptor and engaging both the adaptor and the tendon; and

a bushing engaging the adaptor so as to bias the O-ring into sealing engagement with the adaptor and the tendon; and

wherein the O-ring is a backside O-ring, wherein the bushing is a backside bushing, and wherein the frontside seal comprises:

a cap engaging the intermediate anchor;

a frontside O-ring within the cap and engaging both the cap and the tendon; and,

a frontside bushing engaging the cap so as to bias the frontside O-ring into sealing engagement with the cap and the tendon.

23. (Original) The intermediate anchor system of claim 12 wherein the backside seal is on a bearing side of the intermediate anchor system, and wherein the backside seal comprises an adaptor and a bushing engaging one another.

24. (Original) The intermediate anchor system of claim 23 wherein the backside seal further comprises an O-ring biased into sealing engagement with the adaptor and the tendon when the adaptor and the bushing engage one another.

25. (Previously Presented) An intermediate anchor system comprising:

a tendon having a greased cable within a sheathing, wherein the tendon has an exposed portion, and wherein the exposed portion has no sheathing;

an intermediate anchor having a backside, a frontside, a cover, and a wedge hole defined within the cover and arranged to receive a wedge, wherein the sheathed tendon extends through the intermediate anchor, and wherein the cover is sized so that the exposed portion of the intermediate anchor is entirely within the cover;

a wedge within the wedge hole and clamped to the exposed portion of the sheathed tendon;

a backside seal engaging the sheathed tendon at the backside of the intermediate anchor; and,

a frontside seal engaging the sheathed tendon at the frontside of the intermediate anchor, wherein the backside and frontside seals seal the exposed portion of the sheathed tendon.

26. (Original) The intermediate anchor system of claim 25 wherein the backside seal comprises an adaptor engaging the intermediate anchor and an O-ring engaging the adaptor and the tendon.

27. (Original) The intermediate anchor system of claim 26 wherein the backside seal further comprises a bushing biasing the O-ring into sealing engagement with the adaptor and the tendon.

28. (Original) The intermediate anchor system of claim 25 wherein the frontside seal comprises a cap engaging the intermediate anchor and an O-ring engaging the cap and the tendon.

29. (Original) The intermediate anchor system of claim 28 wherein the frontside seal further comprises a bushing biasing the O-ring into sealing engagement with the cap and the tendon.

30. (Original) The intermediate anchor system of claim 28 wherein the O-ring has an inner diameter larger than an outer diameter of the tendon.

31. (Original) The intermediate anchor system of claim 25 wherein the backside seal comprises an adaptor engaging the intermediate anchor and a backside O-ring engaging the adaptor and the tendon, and wherein the frontside seal comprises a cap engaging the intermediate anchor and a frontside O-ring engaging the cap and the tendon.

32. (Previously Presented) An intermediate anchor system comprising:

a tendon having a greased cable within a sheathing, wherein the tendon has an exposed portion, and wherein the exposed portion has no sheathing;

an intermediate anchor having a backside, a frontside, a cover, and a wedge hole defined within the cover and arranged to receive a wedge, wherein the sheathed tendon extends through the intermediate anchor so that the exposed portion is within the cover;

a wedge within the wedge hole and clamped to the exposed portion of the sheathed tendon;

a backside seal engaging the sheathed tendon at the backside of the intermediate anchor; and,

a frontside seal engaging the sheathed tendon at the frontside of the intermediate anchor, wherein the backside and frontside seals seal the exposed portion of the sheathed tendon; and

wherein the backside seal comprises an adaptor engaging the intermediate anchor and a backside O-ring engaging the adaptor and the tendon, and wherein the frontside seal comprises a cap engaging the intermediate anchor and a frontside O-ring engaging the cap and the tendon; and

wherein the backside seal further comprises a backside bushing biasing the backside O-ring into sealing engagement with the adaptor and the tendon, and wherein the frontside seal further comprises a frontside bushing biasing the frontside O-ring into sealing engagement with the cap and the tendon.

33. (Original) The intermediate anchor system of claim 25 wherein the backside seal comprises:

an adaptor engaging the intermediate anchor;

an O-ring within the adaptor and engaging both the adaptor and the tendon; and,

a bushing engaging the adaptor so as to bias the O-ring into sealing engagement with the adaptor and the tendon.

34. (Previously Presented) An intermediate anchor system comprising:

a tendon having a greased cable within a sheathing, wherein the tendon has an exposed portion, and wherein the exposed portion has no sheathing;

an intermediate anchor having a backside, a frontside, a cover, and a wedge hole defined within the cover and arranged to receive a wedge, wherein the sheathed tendon extends through the intermediate anchor so that the exposed portion is within the cover;

a wedge within the wedge hole and clamped to the exposed portion of the sheathed tendon;

a backside seal engaging the sheathed tendon at the backside of the intermediate anchor; and,

a frontside seal engaging the sheathed tendon at the frontside of the intermediate anchor, wherein the backside and frontside seals seal the exposed portion of the sheathed tendon; and

wherein the backside seal comprises:

an adaptor engaging the intermediate anchor;

an O-ring within the adaptor and engaging both the adaptor and the tendon; and,

a bushing engaging the adaptor so as to bias the O-ring into sealing engagement with the adaptor and the tendon; and

wherein the O-ring is a backside O-ring, wherein the bushing is a backside bushing, and wherein the frontside seal comprises:

a cap engaging the intermediate anchor;

a frontside O-ring within the cap and engaging both the cap and the tendon; and,

a frontside bushing engaging the cap so as to bias the frontside O-ring into sealing engagement with the cap and the tendon.

35. (Original) The intermediate anchor system of claim 25 wherein the frontside seal comprises:

- a cap engaging the intermediate anchor;
- an O-ring within the cap and engaging both the cap and the tendon; and,
- a bushing engaging the cap so as to bias the O-ring into sealing engagement with the cap and the tendon.

36. (Original) A method comprising:

- placing an intermediate anchor having a wedge hole at a concrete construction joint;
- inserting a tendon through the intermediate anchor leaving a sheathing of the tendon substantially intact;
- sealing the intermediate anchor on a bearing side of the concrete construction joint;
- making a cut circumferentially around the sheathing in the wedge hole;
- tensioning the sheathed tendon following setting of concrete poured on the bearing side of the concrete construction joint, thereby creating an exposed portion of the tendon;
- gripping the exposed portion with a wedge to hold the tension; and,
- sealing the intermediate anchor on a stressing side of the concrete construction joint.

37. (Original) The method of claim 36 wherein the sealing of the intermediate anchor on the bearing side of the concrete construction joint comprises attaching an adaptor to the intermediate anchor on the bearing side and inserting an O-ring within the adaptor so as to engage the adaptor and the tendon.

38. (Original) The method of claim 37 wherein the sealing of the intermediate anchor on the bearing side of the concrete construction joint further comprises attaching a bushing to the adaptor so as to bias the O-ring into sealing engagement with the adaptor and the tendon.

39. (Original) The method of claim 36 wherein the sealing of the intermediate anchor on the stressing side of the concrete construction joint comprises attaching a cap to the intermediate anchor on the stressing side and inserting an O-ring within the cap to engage the cap and the tendon.

40. (Original) The method of claim 39 wherein the sealing of the intermediate anchor on the stressing side of the concrete construction joint further comprises attaching a bushing to the cap so as to bias the O-ring into sealing engagement with the cap and the tendon.

41. (Original) The method of claim 36 wherein the sealing of the intermediate anchor on the bearing and stressing sides of the concrete construction joint comprises:

attaching an adaptor to the intermediate anchor on the bearing side and inserting a backside O-ring within the adaptor so as to engage the adaptor and the tendon; and,

attaching a cap to the intermediate anchor on the stressing side and inserting a frontside O-ring within the cap so as to engage the cap and the tendon.

42. (Original) The method of claim 41 further comprising:

attaching a backside bushing to the adaptor so as to bias the backside O-ring into sealing engagement with the adaptor and the tendon; and,

attaching a frontside bushing to the cap so as to bias the frontside O-ring into sealing engagement with the cap and the tendon.

43. (Original) The method of claim 36 wherein the sealing of the intermediate anchor on the bearing side of the concrete construction joint comprises:

attaching an adaptor having an adaptor neck to an anchor neck of the intermediate anchor;

inserting an O-ring within the adaptor so as to engage both the adaptor and the tendon; and,

engaging a bushing to the adaptor so as to bias the O-ring into sealing engagement with the adaptor and the tendon.

44. (Original) The method of claim 36 wherein the sealing of the intermediate anchor on the stressing side of the concrete construction joint comprises:

attaching a cap to the intermediate anchor;

inserting an O-ring within the cap so as to engage both the cap and the tendon; and,

engaging a bushing to the cap so as to bias the O-ring into sealing engagement with the cap and the tendon.

45. (Original) The method of claim 36 wherein the sealing of the intermediate anchor on the bearing and stressing sides of the concrete construction joint comprises:

attaching an adaptor having an adaptor neck to an anchor neck of the intermediate anchor on the bearing side;

inserting a backside O-ring within the adaptor so as to engage both the adaptor and the tendon;

engaging a backside bushing to the adaptor so as to bias the backside O-ring into sealing engagement with the adaptor and the tendon;

attaching a cap to the intermediate anchor on the stressing side;

inserting a frontside O-ring within the cap so as to engage both the cap and the tendon; and,

engaging a frontside bushing to the cap so as to bias the frontside O-ring into sealing engagement with the cap and the tendon.

46. (Original) The method of claim 36 wherein the tensioning of the sheathed tendon comprises applying a jack and a gripper wedge to the tendon.

47. (Original) The method of claim 36 wherein the sealing of the intermediate anchor on the bearing side of the concrete construction joint comprises:

attaching an adaptor to the intermediate anchor on the bearing side; and,
engaging a bushing to the adaptor.

48. (Original) The method of claim 36 wherein the sealing of the intermediate anchor on the bearing and stressing sides of the concrete construction joint comprises:

attaching an adaptor to the intermediate anchor on the bearing side;
engaging a backside bushing to the adaptor;
attaching a cap to the intermediate anchor on the stressing side; and,
engaging a frontside bushing to the cap.

49. (Original) The method of claim 36 wherein the tensioning of the sheathed tendon damages the sheathing of the tendon, and wherein the method further comprises repairing the damage before pouring concrete on the stressing side of the concrete construction joint.

50. (Original) The method of claim 49 wherein the repairing of the damage comprises taping.

51. (Previously Presented) An intermediate anchor for anchoring a tendon in concrete, the tendon surrounded by a sheath having an outside diameter, the intermediate anchor having an O-ring to provide a seal between the intermediate anchor and the tendon, the O-ring having an inside diameter, the inside diameter of the O-ring being sufficiently larger than the outside diameter of the sheath in order to permit the O-ring to move freely over the sheath during installation.

52. (Previously Presented) The intermediate anchor system of claim 51 including an adaptor sized to receive the tendon and the O-ring, and a bushing, the bushing and the adaptor arranged to compress the O-ring around the tendon.

53. (Previously Presented) The intermediate anchor system of claim 52, wherein the bushing is internally threaded and the adaptor is externally threaded.

54. (Previously Presented) The intermediate anchor system of claim 12, wherein the exposed portion of the tendon is confined within an anchor cap.

55. (Previously Presented) The intermediate anchor system of claim 25, wherein the exposed portion of the tendon is confined within an anchor cap.